

CURRICULUM VITAE
SEPTEMBER 2016

DAVID O. CONOVER

Vice President for Research and Innovation
University of Oregon
Eugene, OR 97403
E-mail: dconover@uoregon.edu
541-346-2090 (Office)

and

Professor
Department of Biology
University of Oregon
Eugene, OR 97403

CITIZENSHIP: U.S.A.

EDUCATION:

B.S., 1975 (with honors), Biology, Eckerd College, St. Petersburg, Fla.
M.S., 1979, University of Massachusetts, Amherst
Ph.D., 1982, University of Massachusetts, Amherst

PERSONAL: Married (Dr. Margaret Conover), two adult children (Adam, Emily)

PROFESSIONAL EXPERIENCE

University of Oregon

Aug 2016-present, Vice President for Research and Innovation

Stony Brook University

Jan 2015-Aug 2016, Vice President for Research

Dec 2013-Jan 2015, Interim Vice President for Research

National Science Foundation

Jul 2010-Dec 2013, Director, Division of Ocean Sciences

National Science Foundation

School of Marine and Atmospheric Sciences, Stony Brook University

Feb 2003-June 2010, Dean

Sep 1993-Aug 2016, Professor

Sep 1987-Aug 1993, Associate Professor

Sep 1981-Aug 1987, Assistant Professor

Department of Biological Science, Florida State University
1997-1998 Mote Eminent Scholar Chair in Fisheries Ecology
(visiting appointment)

HONORS AND FELLOWSHIPS:

- Stoye Award, best paper, 1981 meeting of the American Society of Ichthyologists and Herpetologists.
- Most significant paper of 1990, awarded by the American Fisheries Society
- William and Lenore Mote Eminent Scholar Chair in Fisheries Ecology, Florida State University, 1997-98.
- Aldo Leopold Leadership Fellow, 2005.
- NY League of Conservation Voters, Preserving Long Island Legacy Award, 2005
- Distinguished Alumni Award, University of Massachusetts, 2006
- Frank and Marjorie Meek Visiting Scholar, University of Alaska, 2010
- William H. Kadel Alumni Medal for Outstanding Career Achievement, 2015, Eckerd College
- American Fisheries Society, Oscar E. Sette Award 2015: outstanding career achievement award in Marine Fishery Biology
- Fellow of American Association for the Advancement of Science (elected 2015)

HIGHLIGHTS OF ACCOMPLISHMENTS AS VICE PRESIDENT FOR RESEARCH

- Broadly responsible for encouraging and facilitating excellence in scholarship, research and creative activities, encouraging investment in research infrastructure, increasing external funding from major public and private funding sources, advancing translational research for successful technology transfer and economic development, and ensuring compliance with all applicable laws and regulations related to the responsible conduct of research
- Increased externally-sponsored annual research expenditures by 5.5% and number of new proposals submitted by 22% in FY 14-15

- Developed and launched Stony Brook University's first ever Discovery Fund competition, a philanthropy-based initiative to fund transformative research by emerging, early-career faculty and increase privately funded research
- Contributed to Stony Brook's successful re-competition of the Department of Energy (DOE) contract to continue as the co-manager (with Battelle) of Brookhaven National Lab, including 23 Stony Brook/BNL faculty joint appointments and 2,850 employees
- Co-championed three SUNY Networks of Excellence, an initiative to stimulate collaboration of faculty across the SUNY system to generate large, team-based proposals to federal agencies and industry

HIGHLIGHTS OF ACCOMPLISHMENTS AS DIVISION DIRECTOR AT NSF (2010-2013)

- Developed the framework for and launched the first Decadal Survey of Ocean Sciences, a community-based process for defining research priorities for NSF in the context of resource availability
- Responsible for development and management of a \$350 million annual budget, the 2nd largest Division in NSF
- Responsible for oversight of two major facility construction projects
 - Ocean Observatory Initiative (\$386 million)
 - Alaskan Research Vessel, *R/V Sikuliaq*, (\$200 million)
- Responsible for U.S. federal support of academic research, facilities, and education programs in ocean sciences including fleet operations, deep submersible programs
- Instituted two new research solicitations involving diversity focused on Broadening Participation: one providing post-doc fellowships and one providing research initiation awards to early career scientists
- Instituted strategic planning effort for OCE including guidance for improving internal operating procedures
- Instituted transparent, shared decision-making processes that encourages input through the OCE Mgmt team, monthly staff meetings, and 1 on 1 with all program officers and science assistants

- Instituted new guidelines for searches that require search committees and input from all OCE members and oversaw the hiring of numerous new program officers, science assistants, and program specialists
- Negotiated new international agreement with Japan and a consortium of European countries relative to renewal and continuation of the Integrated Ocean Drilling Program (~\$65 million annual investment from NSF)
- Led the effort to define research priorities in ocean science for the Nation by co-writing the refresh of the Ocean Research Priorities Plan and also co-leading the National Ocean Policy strategic plan on "Inform Decisions and Improve Understanding". As co-chair of OST-IPC, involved in all aspects of the implementation plan for the National Ocean Policy
- Led the NSF response to the DWH Oil spill, serving as the senior point of contact for interagency and media interactions. OCE was the lead NSF Division in issuing Rapid Awards (\$8 million in awards, \$5 million in shiptime) and co-sponsored the first national conference for scientists to share findings. Also represented NSF in the interagency effort to fulfill the Incident Commander's Directive to determine the ultimate fate of the oil, gas, and dispersants
- Lead role on the following federal interagency activities in D.C:
 - Co-Chair, Subcommittee on Ocean Science and Technology (SOST), reporting to Office of Science and Technology Policy (OSTP), the Council on Environmental Quality (CEQ) and National Ocean Council (NOC)
 - Member, Steering Committee, NOC
 - Co-chair, Writing Team, NOC Strategic Action Plan, Inform Decisions and Improve Understanding
 - Co-leader, Ocean Research Priorities Plan – Refresh
 - Co-leader, DWH Oil Spill Research Conference
 - NSF Senior Point of Contact, Federal Response to DWH Oil Spill

HIGHLIGHTS OF ACCOMPLISHMENTS AS DEAN AT STONY BROOK (2003-2010)

Academic Planning and Organization

- Organized and Chaired Provost's task force to design campus-wide interdepartmental graduate research and education program in Environmental Science, instituted in 2006

- Led process of transferring the marine undergraduate programs and facilities from Southampton College of Long Island University (LIU) to Stony Brook, including approvals through the NY State Education Department
- Chaired a task force recommending to the President that Stony Brook acquire the 85 acre campus of Southampton College from LIU in order to create a new college with research and education focused on environmental sustainability. First freshmen class enrolled Fall 07
- Led the transition of the "Marine Sciences Research Center" into the "School of Marine and Atmospheric Sciences" in 2007

Building External Partnerships

- Established the Institute for Ocean Conservation Science at Stony Brook, including \$3.75 million in funding from the Pew Charitable Trusts
- Forged agreement with the New York Department of Environmental Conservation that provided 1:1 co-funding of new faculty positions as well as funds to support a wide variety of research projects (about \$1million/yr)
- Established agreement with NY Department of State to fund projects on behalf of the New York Ocean and Great Lakes Ecosystem Council (about \$1 million/yr)
- Founded the New York Marine Sciences Consortium, a group of 26 degree-granting academic institutions with expertise in marine sciences. Served as the Consortium's first Director. See <http://www.nymarinesciences.org/>

Legislative Initiatives and Testimony

- Successfully lobbied NY legislature for \$1.4 million for continued funding of NY's only marine animal disease laboratory
- Acquired \$6.9 million in state funding for new marine lab building in the '08-'09 budget
- Testified before two state legislative hearings: one on the status of NY's marine ecosystem, the other on the impact of an LNG terminal in Long Island Sound

- Presented briefing in D.C. for members of U.S. House of Representatives on ecosystem-based management
- Testified before U.S. Senate Committee on Commerce, Science, and Transportation regarding the impacts of climate change and ocean acidification on living marine resources ecosystems

Enrollment growth

- Reversed declining graduate student enrollment by instituting aggressive approaches for attracting top candidates. Increased graduate enrollment by 20% in three years
- Increased undergraduate enrollment from about 50 majors in Fall 2005 to over 500 majors by Fall 2009

Private Fund Raising

- Increased total annual contributions from nil to over \$6 million in 2008
- Largest major gift of \$2.7 million, acquired in December '08
- Increased support from private foundations from zero to \$3.75 million
- Established communications network with SoMAS alumni, organized annual Alumni Day reunions, created electronic alumni newsletters, and began first annual gift campaign
- Created Dean's Council of SoMAS, a group of about a dozen governmental, business, environmental NGO, and philanthropic leaders who help advance the mission of SoMAS

BOARD MEMBERSHIPS AND PROFESSIONAL SERVICE (Current)

- Board of Directors, Long Island High Technology Incubator
- Executive Committee, Council on Research, American Association of Land-grant and Public Universities (APLU)
- Institutional Representative Board, Center for Mesoscale Transport Properties, Energy Frontiers Research Center
- Executive Committee, Alan Alda Center for Communicating Science
- BNL/SBU Management Committee

BOARD MEMBERSHIPS AND PROFESSIONAL SERVICE (Previous)

- Chair, Board of Governors, New York Sea Grant Institute.
- Board of Trustees, Consortium for Ocean Leadership (COL)
- National Association of State Universities and Land-Grant Colleges (NASULGC), Board on Natural Resources, and Board on Oceans and Atmospheres
- Board member, National Association of Marine Laboratories (NAML)
- Member, New York Oceans and Great Lakes Ecosystem Conservation Council (SUNY Chancellor's designee)
- Co-Chair, Scientific Advisory Group, New York Oceans and Great Lakes Ecosystem Conservation Council
- Governor's appointee to the New York Sea Grass Restoration Task Force, voting member
- NRC Review Panel, Ocean Studies Board, Ocean Research Priorities Plan and Implementation Strategy.
- Co-Chair of the Ecosystem Science and Management Working Group of the Scientific Advisory Board of NOAA

PUBLICATIONS (Google Scholar H index = 56; No. of citations >10,400):

1. Conover, D.O. and G.K. Reid. 1975. Distribution of the boring isopod *Sphaeroma terebrans* in Florida. Florida Scientist 38(2): 65-72.
2. Conover, D.O. and B. E. Kynard. 1981. Environmental sex determination: interaction of temperature and genotype in a fish. Science 213: 577-579.
3. Conover, D.O. and S.A. Murawski. 1982. Offshore winter migration of the Atlantic silverside *Menidia menidia*. Fishery Bulletin 80:145-149.
4. Conover, D.O. and M.R. Ross. 1982. Patterns in seasonal abundance, growth, and biomass of the Atlantic silverside, *Menidia menidia*, in a New England estuary. Estuaries 5:275-286.
5. Edwards, D.C., D.O. Conover, and F. Sutter. 1982. Mobile predators and the structure of marine benthic communities. Ecology 63:1175-1179.

6. Conover, D.O. 1983. Stock concept international symposium. Q. Rev. Biol. 58: 274.
7. Conover, D.O. and B.E. Kynard. 1984. Field and laboratory observations of spawning periodicity and behavior of a northern population of the Atlantic silverside, *Menidia menidia* (Pisces: Atherinidae). Environmental Biology of Fishes 11: 161-171.
8. Conover, D.O. 1984. Adaptive significance of temperature-dependent sex determination in a fish. American Naturalist 123: 297-313.
9. Conover, D.O. 1985. Field and laboratory assessment of patterns in fecundity of a multiple spawning fish: the Atlantic silverside, *Menidia menidia*. Fishery Bulletin 83(3): 331-341.
10. Conover, D.O. and M. Fleisher. 1986. The temperature-sensitive period of sex determination in *Menidia menidia*. Can. J. Fish. Aq. Sci. 43(3): 514-520.
11. McHugh, J.L. and D.O. Conover. 1986. History and condition of food finfisheries in the middle Atlantic region compared with other sections of the coast. Fisheries 11(5): 8-13.
12. Conover, D.O. 1986. Review of "Fish Reproduction: Strategies and Tactics" (book review). BioScience 36(4): 274.
13. Tewksbury II, H. T. and D.O. Conover. 1987. Adaptive significance of intertidal egg deposition in the Atlantic silverside, *Menidia menidia*. Copeia 1987(1): 76-83.
14. Conover, D.O. and S.W. Heins. 1987. The environmental and genetic components of sex ratio in *Menidia menidia*. Copeia 1987(3): 732-743.
15. Conover, D.O. and S.W. Heins. 1987. Adaptive variation in environmental and genetic sex determination in a fish. Nature 326:496-498.
16. Nyman, R.M. and D.O. Conover. 1988. The relation between spawning season and the recruitment of young-of-the-year bluefish (*Pomatomus saltatrix*) to New York. Fishery Bulletin 86: 237-250.
17. Conover, D.O. 1988. Biological Surveys of Estuaries and Coasts. Fisheries 13(2): 58.
18. Conover, D.O. 1990. The relation between capacity for growth and length of growing season: evidence for and implications of countergradient variation. Trans. Amer. Fish. Soc. 119: 416-430.

19. Conover, D.O. and T.M.C. Present. 1990. Countergradient variation in growth rate: compensation for length of the growing season among Atlantic silversides from different latitudes. *Oecologia* 83:316-324.
20. Chiarella, L. and D.O. Conover. 1990. Spawning season and first year growth of adult bluefish (*Pomatomus saltatrix*) from the New York Bight. *Trans. Amer. Fish. Soc.* 119:455-462.
21. Conover, D.O. and D.A. Van Voorhees. 1990. Evolution of a balanced sex ratio by frequency-dependent selection in a fish. *Science* 250:1556-1558.
22. Conover, D.O. and S.B. Demond. 1991. Absence of temperature-dependent sex determination in northern populations of two cyprinodontid fishes. *Can. J. Zool.* 69: 530-533.
23. McBride, R.S. and D.O. Conover. 1991. Recruitment of young-of-the-year bluefish (*Pomatomus saltatrix*) to the New York Bight: variation in abundance and growth of spring and summer-spawned cohorts. *Mar. Ecol. Prog. Ser.* 78: 205-216.
24. Present, T.M.C. and D.O. Conover. 1992. Physiological basis of latitudinal growth differences in *Menidia menidia*: variation in consumption or efficiency? *Functional Ecology* 6: 23-31.
25. Conover, D.O., D.A. Van Voorhees, and A. Ehtisham. 1992. Sex ratio selection and changes in environmental sex determination in laboratory populations of *Menidia menidia*. *Evolution* 46:1722-1730.
26. Conover, D.O. 1992. Seasonality and the scheduling of life history at different latitudes. *J. Fish Biol.*, 41 (Suppl. B): 161-178.
27. Lagomarsino, I., and D.O. Conover. 1993. Variation in environmental and genetic sex determining mechanisms across a latitudinal gradient in the fish, *Menidia menidia*. *Evolution* 47:487-494.
28. Marks, R. and D.O. Conover. 1993. Ontogenetic shift in the diet of young-of-the-year bluefish (*Pomatomus saltatrix*) during the oceanic phase of the early life history. *Fishery Bulletin* 91:97-106.
29. McBride, R.S., J.L. Ross, and D.O. Conover. 1993. Recruitment of bluefish (*Pomatomus saltatrix*) to estuaries of the South Atlantic Bight, U.S.A. *Fishery Bulletin* 91:389-395.
30. Juanes, F., R.E. Marks, K.A. McKown, and D.O. Conover. 1993. Predation by age-0 bluefish on age-0 anadromous fishes in the Hudson River estuary. *Trans. Amer. Fish. Soc.* 122: 348-356.

31. Conover, D.O. 1994. A framework for further study of recruitment processes in the flatfishes. *Neth. J. Sea Res.* 32:231-233.
32. Juanes, F. and D.O. Conover. 1994. Piscivory and prey size selection in young-of-the-year bluefish: predator preference or size-dependent capture success? *Marine Ecology Progress Series* 114:59-69.
33. Juanes, F. and D.O. Conover. 1994. Rapid growth, high feeding rates, and early piscivory in young-of-the-year bluefish. *Can. J. Fish. Aquat. Sci.* 51:1752-1761.
34. Juanes, F.C., J. Buckel, and D.O. Conover. 1994. Accelerating the onset of piscivory: intersection of predator and prey phenologies. *J. Fish Biol.* 45(Suppl. A):41-54.
35. Conover, D.O. and E.T. Schultz. 1995. Phenotypic similarity and the evolutionary significance of countergradient variation. *Trends in Ecol. Evol.* 10(6):248-252.
36. Buckel, J.A., N.D. Steinberg, and D.O. Conover. 1995. Effects of temperature, salinity, and fish size on growth and consumption of juvenile bluefish (*Pomatomus saltatrix* L.). *J. Fish Biol.* 47:696-706.
37. Juanes, F. and D.O. Conover. 1995. Size-structured piscivory: advection and linkage between predator and prey recruitment in young-of-the-year bluefish. *Mar. Ecol. Prog. Ser.* 128:287-304.
38. Schultz, E.T., K.E. Reynolds and D.O. Conover. 1996. Countergradient variation in growth among newly-hatched *Fundulus heteroclitus*: geographic differences revealed by common-environment experiments. *Funct. Ecol.* 10:366-374.
39. Buckel, J.A. and D.O. Conover. 1996. Gastric evacuation rates of juvenile bluefish, *Pomatomus saltatrix*. *Trans. Amer. Fish. Soc.* 125:591-599.
40. Marks, R.E., F. Juanes, J.A. Hare, and D.O. Conover. 1996. Occurrence and effect of the parasitic isopod *Lironeca ovalis* (Isopoda, Cymothoidae) on young-of the year bluefish (*Pomatomus saltatrix*) (Pisces: Pomatomidae). *Can. J. Fish. Aquat. Sci.* 53:2052-2057.
41. Conover, D.O. and E.T. Schultz. 1997. Natural selection and the evolution of growth rate in the early life history: what are the trade-offs? pp. 305-332 In Chambers, R.C. and E. A. Trippel (eds.), *Early life history and recruitment in fish populations*. Chapman and Hall, London.

42. Schultz, E.T. and D.O. Conover. 1997. Latitudinal differences in somatic energy storage: adaptive responses to seasonality in an estuarine fish Atherinidae: *Menidia menidia*). *Oecologia* 109:516-529.
43. Conover, D.O. 1997. Review of "Survival strategies in the Early Life Stages" by Y. Watanabe et al., A.A. Balkema Publishers Rotterdam. *Quart. Rev. Biol* 72:92-93.
44. Scharf, F., J.A. Buckel, F. Juanes, and D.O. Conover. 1997. Estimating piscine prey size from partial remains: testing for shifts in foraging mode by juvenile bluefish. *Environ. Biol. Fishes*. 49:377-388.
45. Billerbeck, J. M., G. Orti, and D.O. Conover. 1997. Latitudinal variation in vertebral number has a genetic basis in the Atlantic silverside, *Menidia menidia*. *Can. J. Fish. Aquat. Sci.* 54:1796-1801.
46. Buckel, J.A. and D.O. Conover. 1997. Movements, feeding periods, and daily ration of piscivorous young-of-the-year bluefish (*Pomatomus saltatrix*) in the Hudson River estuary. *Fish. Bull.* 95:665-679.
47. Conover, D.O., J.J. Brown, and A. Ehtisham. 1997. Countergradient variation in growth of young striped bass (*Morone saxatilis*) from different latitudes. *Can. J. Fish. Aquat. Sci.* 54:2401-2409.
48. Conover, D.O. 1998. Local adaptation in marine fishes: evidence and implications for stock enhancement. *Bull. Mar. Sci.* 62: 305-311.
49. Schultz, E.T., D.O. Conover, and A. Ehtisham. 1998. The dead of winter: size-dependent variation and genetic differences in seasonal mortality among Atlantic silversides (Atherinidae: *Menidia menidia*) from different latitudes. *Can. J. Fish. Aquat. Sci.* 55:1149-1157.
50. Buckel, J.A., B.H. Letcher, and D.O. Conover. 1998. Effects on size of a delayed onset of piscivory in young-of-the-year bluefish (*Pomatomus saltatrix*). *Trans. Amer. Fish. Soc.* 127:576-587.
51. Hurst, T.P. and D.O. Conover. 1998. Winter mortality of young-of-the-year Hudson River striped bass (*Morone saxatilis*): size-dependent patterns and effects on recruitment. *Can. J. Fish. Aquat. Sci.*, 55:1122-1130.
52. Brown, J.J., A. Ehtisham, and D.O. Conover. 1998. Variation in larval growth among striped bass stocks from different latitudes. *Trans. Amer. Fish. Soc.* 127:598-610.
53. Scharf, F., J.A. Buckel, F. Juanes, and D.O. Conover. 1998. Predation by juvenile piscivorous bluefish (*Pomatomus saltatrix*): the influence of prey to

predator size ratio and prey type on predator capture success and prey profitability. Can. J. Fish. Aquat. Sci. 55:1695-1703.

54. Travis, J., F. Coleman, C. Grimes, D. Conover, T. Bert, and M. Tringali. 1998. Critically assessing stock enhancement: An introduction to the Mote Symposium. Bull. Mar. Sci. 62: 305-311.

55. Buckel, J.A., D.O. Conover, N.D. Steinberg, and K.A. McKown. 1999. Impact of age-0 bluefish predation on age-0 fishes in the Hudson River estuary: evidence for density-dependent loss of juvenile striped bass. Can J. Fish. Aquat. Sci. 56: 275-287.

56. Schultz, E.T. and D.O. Conover. 1999. The allometry of energy reserve depletion: test of a mechanism for size-dependent winter mortality. Oecologia 119:474-483.

57. Buckel, J.A., M. Fogarty and D.O. Conover. 1999. Foraging ecology of bluefish on the US east coast continental shelf. Fishery Bulletin 97:776-785.

58. Buckel, J.A., M. Fogarty and D.O. Conover. 1999. Mutual prey of fish and fishers: a comparison of biomass harvested by bluefish with fishery landings. Fishery Bulletin 97:758-775.

59. Hurst, T.P., E.T. Schultz, and D.O. Conover. 2000. Seasonal energy dynamics of young-of-the-year Hudson River striped bass. Trans. Amer. Fish. Soc. 129:145-157.

60. Billerbeck, J.M., E.T. Schultz, and D.O. Conover. 2000. Adaptive variation in energy acquisition and allocation among latitudinal populations of the Atlantic silverside. Oecologia 122:210-219

61. Conover, D.O., J. Travis, and F.C. Coleman. 2000. Essential fish habitat and marine reserves: an introduction to the second Mote Symposium on fisheries ecology. Bull. Mar. Sci. 66(3):1-8.

62. Munch, S. and D.O. Conover. 2000. Recruitment dynamics of bluefish (*Pomatomus saltatrix*) from Cape Hatteras to Cape Cod, 1973-1995. ICES J. Mar. Sci. 57:393-402.

63. Conover, D.O. 2000. Darwinian fishery science. Mar. Ecol. Prog. Ser. 208:303-307.

64. Hurst, T.P. and D.O. Conover. 2001. Activity related constraints for overwintering striped bass (*Morone saxatilis*). Can. J. Zool. 79:129-136.

65. Hurst, T.P. and D.O. Conover. 2001. Diet and consumption rates of overwintering YOY striped bass, *Morone saxatilis*, in the Hudson River. Fish. Bull. 99: 545-553.
66. Billerbeck, J.M., T.E. Lankford, and D.O. Conover. 2001. Evolution of intrinsic growth and energy acquisition rates: I. Tradeoffs with swimming performance in *Menidia menidia*. Evolution 55:1863-1872.
67. Lankford, T.E., J.M. Billerbeck, and D.O. Conover. 2001. Evolution of intrinsic growth and energy acquisition rates: II. Tradeoffs with vulnerability to predation in *Menidia menidia*. Evolution 55:1873-1881.
68. Yamahira, K. and D.O. Conover. 2002. Intra- vs. interspecific latitudinal variation in growth: adaptation to temperature or length of the growing season? Ecology 83(5): 1252-1262.
69. Munch, S.B. and D.O. Conover. 2002. Accounting for local physiological adaptation in bioenergetic models: testing hypotheses for growth rate evolution by virtual transplant experiments. Can. J. Fish. Aquat. Sci. 59:393-403.
70. Hurst, T.P. and D.O. Conover. 2002. Interaction of temperature and salinity in determining mortality and optimal overwintering habitats of young-of-the-year Hudson River striped bass (*Morone saxatilis*). Can. J. Fish. Aquat. Sci. 59: 787-795.
71. Conover, D.O. and S.B. Munch. 2002. Sustaining fisheries yields over evolutionary time scales. Science 297 (5578): 94-96.
72. Schultz, E.T., T.E. Lankford, and D.O. Conover. 2002. The covariance of routine and compensatory juvenile growth rates over a seasonality gradient in a coastal fish. Oecologia 133:501-509.
73. Yamahira, K. and D.O. Conover. 2003. Interpopulation variability in temperature-dependent sex determination of the tidewater silverside *Menidia peninsulae* (Pisces: Atherinidae). Copeia 2003:155-159.
74. Munch, S.B., M. Mangel, and D.O. Conover. 2003. Quantifying natural selection on body size from field data with an application to winter mortality in *Menidia menidia*. Ecology 84(8): 2168-2177.
75. Munch, S.B. and D.O. Conover. 2003. Rapid growth results in increased susceptibility to predation in *Menidia menidia*. Evolution 57 (9): 2119-2127
76. Conover, D.O., T. Gilmore, and S. B. Munch. 2003. Estimating the relative contribution of spring and summer-spawned cohorts to the Atlantic coast bluefish stock. Trans. Amer. Fish. Soc. 132 (6): 1117-1124.

77. Hurst, T.P. and D.O. Conover. 2003. Seasonal and interannual variation in the allometry of energy allocation in juvenile striped bass. *Ecology* 84: 3360-3369.
78. Conover D. O. 2003. Countergradient variation and the evolution of growth rate: Lessons from silverside fishes. *Integrative and Comparative Biology* 43 (6): 922.
79. Munch, S.B., M. Walsh, and D. O. Conover. In press. Darwinian fishery management: rapid evolution of somatic growth and yield in experimentally harvested marine fish populations. *In Fisheries Induced Adaptive Change*, U. Dieckmann, M. Heino, O. Gogo, J. Mork (eds). Cambridge Univ. Press.
80. Munch S.B. and D.O. Conover. 2004. Nonlinear growth cost in *Menidia menidia*: Theory and empirical evidence. *Evolution* 58 (3): 661-664.
81. Conover, D.O. 2004. Temperature-dependent sex determination in fishes. pp. 11-20 *In Temperature-dependent sex determination*. N. Valenzuela and V. Lance (eds). Smithsonian Institution Press. (194 p).
82. E. K. Pikitch, C. Santora, E. A. Babcock, A. Bakun, R. Bonfil, D.O. Conover, P. Dayton, P. Doukakis, D. Fluharty, B. Heneman, E. D. Houde, J. Link, P. A. Livingston, M. Mangel, M. K. Mcallister, J. Pope, K. J. Sainsbury. 2004. Ecosystem-based fishery management. *Science* 305 (5682): 346-347
83. Hurst, T.P., K.A. McKown, and D.O. Conover. 2004. Interannual and long term variation in the near-shore fish community of the mesohaline Hudson River estuary. *Estuaries* 27(4):659-669.
84. Pikitch, E.K., C. Santora, E. A. Babcock, A. Bakun, R. Bonfil, D.O. Conover, P. Dayton, P. Doukakis, D. Fluharty, B. Heneman, E. D. Houde, P. A. Livingston, M. Mangel, M. K. Mcallister, J. Pope, K. J. Sainsbury. 2004. Fishery management and culling. *Science* 306: 1891-1892.
85. Conover, D. O., S.A. Arnott, M.R. Walsh, and S.B. Munch. 2005. Darwinian fishery science: lessons from the Atlantic silverside. *Can. J. Fish. Aquat. Sci.* 62 (4): 730-737.
86. Munch, S.B., M. Walsh, and D.O. Conover. 2005. Harvest selection, genetic correlations, and evolutionary changes in recruitment: one less thing to worry about? *Can. J. Fish. Aquat. Sci.* 62 (4): 802-810.
87. Clarke, L., A. Dove, D.O. Conover. 2006. Prevalence, intensity, and effect of a nematode *Philometra saltatrix*, in the ovaries of bluefish, *Pomatomus saltatrix*. *Fish. Bull.* 104(1): 118-124.

88. Walsh, M., S. Munch, S. Chiba and D.O. Conover. 2006. Maladaptive changes in multiple traits caused by fishing: impediments to population recovery. *Ecology Letters* 9(2): 142-148.
89. LeBlanc, L. A., J.A. Buckel, D.O. Conover, and B.J. Brownawell. 2006. Tests of bioaccumulation models for pcbs: a study of young-of-the-year bluefish in the Hudson River estuary. *Environmental Toxicology & Chemistry* 25(8): 2067-2076
90. Yamahira, K., T.E. Lankford, and D.O. Conover. 2006. Intra- and Interspecific Latitudinal Variation in Vertebral Number of *Menidia* spp. (Teleostei: Atherinopsidae). *Copeia* 2006(3): 431-436.
91. Arnott, S.A., S. Chiba, and D.O. Conover. 2006. Evolution of intrinsic growth rate: metabolic costs drive tradeoffs between growth and swimming performance in *Menidia menidia*. *Evolution* 60(6): 1269-1278.
92. Conover, D.O., L.M. Clarke, S. B. Munch, and G. N. Wagner. 2006. Spatial and temporal scales of adaptive divergence in marine fishes and the implications for conservation. *J. Fish Biol.* 69:21-47.
93. Weinstein, M.P., R. C. Baird, D. O. Conover, M. Gross, J. Keulartz, D. K. Loomis, Z. Naveh, S. B. Peterson, D. J. Reed, E. Roe, R. L. Swanson, J. A.A. Swart, J. M. Teal, R. E. Turner, and H. J. van der Windt. 2007. Managing coastal resources in the 21st century. *Frontiers in Ecology and the Environment* 5: 43-48.
94. Conover, D.O. and S.B. Munch. 2007. Faith, evolution, and the burden of proof. *Fisheries* 32(2): 90-91.
95. Chiba, S., S.A. Arnott, and D.O. Conover. 2007. Coevolution of foraging behavior with intrinsic growth rate: risk-taking in naturally and artificially selected growth genotypes of *Menidia menidia*. *Oecologia* 154: 237-246.
96. Conover, D.O. 2007. Nets versus nature. *Nature (London)* 450:179-180.
97. Duffy, T.A, A.E. McElroy and D.O. Conover. 2009. Variable susceptibility and response to estrogenic chemicals in *Menidia menidia*. *Mar. Ecol. Progr. Ser.* 380: 245-254.
98. Conover, D.O., T. A. Duffy and L.A. Hice. 2009. The covariance between genetic and environmental influences across ecological gradients: reassessing the evolutionary significance of countergradient and cogradient variation. *The Year in Evolutionary Biology 2009: Ann. N.Y. Acad. Sci.* 1168: 100–129 (2009).
99. Clarke L.M., B.D. Walther, S.B.Munch, S.R. Thorrold, and D.O. Conover. 2009. Chemical signatures in the otoliths of a coastal marine fish, *Menidia*

menidia, from the northeastern United States: spatial and temporal differences. Mar. Ecol. Progr. Ser. 384:261-271.

100. Conover, D.O., S. B. Munch and Stephen A. Arnott. 2009. Reversal of evolutionary downsizing caused by selective harvest of large fish. Proc. Royal Soc. London B. 276:215-220.

101. Conover, D.O. and H. Baumann. 2009. The role of experiments in understanding fishery-induced evolution. Evol. Appl. 2: 276-290.

102. Duffy, T.A., Picha, M.E, Won, E.T., Borski, R.J., McElroy, A.E. and D.O. Conover. 2010. Ontogenesis of gonadal aromatase gene expression in Atlantic silverside (*Menidia menidia*) populations with genetic and temperature-dependent sex determination. J. Exp. Zool. 313A: 421-431.

103. Struessmann C. A.; Conover D. O.; Somoza G. M. and L.A. Miranda, L. A. 2010. Implications of climate change for the reproductive capacity and survival of New World silversides (family Atherinopsidae). J. Fish Biol. 77: 1818-1834.

104. Dunton K. J., Jordaan A., McKown, K.A., Conover, D.O. and M.G. Frisk. 2010. Abundance and distribution of Atlantic sturgeon (*Acipenser oxyrinchus*) within the Northwest Atlantic Ocean, determined from five fishery-independent surveys. Fish. Bull. 108: 450-465.

105. Baumann H, and D.O. Conover. 2011. Adaptation to climate change: contrasting patterns of thermal-reaction-norm evolution in Pacific versus Atlantic silversides. Proc. Roy. Soc. B. 278:2265-2273.

106. Mach, M.E., Sbrocco, E.J., Hice, L.A., Duffy, T.A., Conover, D.O., and P.H. Barber. 2011. Regional differentiation and post-glacial expansion of the Atlantic silverside, *Menidia menidia*, an annual fish with high dispersal potential. Mar. Biol. 158:515-530.

107. Clarke, L. M., S.R. Thorrold, and D.O. Conover. 2011. Population differences in otolith chemistry have a genetic basis in *Menidia menidia*. Can. J. Fish. Aquat. Sci. 68:105-114.

108. Pugh, G. and D.O. Conover. 2011. NSF: Advancing basic ocean research and infrastructure. Sea Tech. 52:20-.

109. Clarke L.M., Munch S.B., Thorrold, S. R., and D.O. Conover. 2011. High connectivity among locally adapted populations of a marine fish (*Menidia menidia*). Ecology 91:3526-3537.

110. Hice, L. A., T.A. Duffy, S.B. Munch and D.O. Conover. 2012. Spatial scale and divergent patterns of variation in adapted traits in the ocean. *Ecol. Lett.* 15:568-575.
111. Wuenschel, M.J. and 14 co-authors. 2012. Recruitment patterns and habitat use of young-of-the-year bluefish along the United States east coast: Insights from coordinated coastwide sampling. *Reviews in Fisheries Science* 20: 80-102.
112. Baumann, H., Casian, J.A.R. and D.O. Conover. 2012. Contrasting latitudinal variations in vertebral number and sex determination in Pacific versus Atlantic silverside fishes. *Copeia* 2012: 341-350.
113. Brown, E.E., Baumann, H., and D.O. Conover. 2012. Absence of countergradient and cogradient variation in an oceanic silverside, the California grunion *Leuresthes tenuis*. *Mar. Ecol. Progr. Ser.* 461: 175–186.
114. Pikitch, E.K. and 20 coauthors. 2012. The global contribution of forage fish to marine fisheries and ecosystems. *Fish and Fisheries* 15 (1): 43-64.
115. Salinas, S., Perez, K.O., Duffy, T.A., Sabatino, S.J., Hice, L.A., Munch, S.B., and D. O. Conover. 2012. The response of correlated traits following cessation of fishery-induced selection. *Evol. Applic.* 5: 657-663.
116. Duffy, T.A., M.E. Picha, R.J. Borski and D.O. Conover. 2013. Circulating levels of plasma IGF-I during recovery from size-selective harvesting in *Menidia menidia*. *Comp. Biochem. Physio. Pt. A: Molecular & Integrative Physio.* 166: 222–227.
117. Brown, E.E., H. Baumann, and D.O. Conover. 2014. Temperature and photoperiod effects on sex determination in a fish. *J. Exp. Mar. Bio. Ecol.* 461:39-43.
118. Conover, D. O., and D. A. Bronk. 2015. A transformational path forward for the ocean sciences community. *Eos* 96 (7): 10-11.
119. Duffy, T.A., L.A. Hice, and D.O. Conover. 2015. Pattern and scale of geographic variation in environmental sex determination in the Atlantic silverside, *Menidia menidia*. *Evolution* 69: 2187-2195.
120. Dunton, K.J., A. Jordaan, D.O. Conover, K.A. McKown, L.A. Bonacci, and M.G. Frisk. 2015. Marine Distribution and Habitat Use of Atlantic Sturgeon in New York Lead to Fisheries Interactions and Bycatch. *Marine and Coastal Fisheries* 7: 18-32.
121. O’Leary, S.J., C. M. Martinez, H. Baumann, D. L Abercrombie, D. O. Conover, G. R. Poulakis, C. H. Murray, K. A. Feldheim, and D.D. Chapman.

2016. Population genetics and geometric morphometrics of the key silverside, *Menidia menidia*, a marine fish in a highly-fragmented, inland habitat. Bull. Mar. Sci. 92:33-50.

RESEARCH GRANTS and CONTRACTS (only those with D.C. as lead PI are shown)

National Science Foundation

1982-84. Temperature-dependent sex determination in the Atlantic silverside and other fishes. \$60,000.

1985-1988. Evolution of temperature-dependent sex determination in fishes. \$178,000.

1988-92. The evolution of environmental and genetic sex determination in fishes. \$297,000.

1989-91. Supplement for research at Long Term Ecological Research Sites (LTER). \$49,000.

1993-96. Countergradient variation: adaptation to seasonality in fishes. \$350,000.

1996-00. Evolution of somatic growth rate in fishes: what are the trade-offs? \$370,000.

2001-2004. Evolution of growth rate: tradeoffs between costs of growth and benefits of increased size. \$420,000.

National Science Foundation. 2005-2010. Collaborative proposal: Local adaptation across latitudes: spatial scales, gene flow, and correlates of countergradient variation. \$860,684 (portion to Stony Brook).

New York Sea Grant (NOAA).

1983-84. Temperature-dependent sex determination in fishes. \$56,000.

1986-89. The relation between oceanic spawning and recruitment of juvenile bluefish to the U.S. Atlantic coast. \$159,000 (co-funded by NY Dept. Env. Conserv.)

1989-1991. The advantages of advection: size-structured piscivory in young-of-the-year bluefish? \$95,000.

1991-92. The capacity for growth among latitudinal populations of fishes: testing the countergradient hypothesis in striped bass. \$148,000.

1992-95. Impact of bluefish predation on young-of-the-year fishes in the Hudson River. \$190,000. (co-funded by Hudson River Fdn.)

1994-96. Recruitment and predation by bluefish on the continental shelf. \$ 135,313.

1996-98. Countergradient latitudinal variation in growth of striped bass implications for aquaculture. \$179,536.

1998-2000. Empirical simulation of the effects of size-selective natural and fishing mortality on the evolution of growth rate in fish stocks. \$180,219.

2000-2002. Effects of size-selective mortality on the evolution of growth rate in fishes: continued empirical simulation. \$197,348.

Other Federal Agencies

USGS. Current status of the Key silverside, *Menidia conchorum*, in southern Florida. 1999-2000. \$9,608.

NOAA/NMFS ICMS Rutgers University. 1998-01 Recruitment of spring and summer-spawned bluefish: genetic structure, cohort identification, and relative contribution to the adult stock. \$218,548.

NOAA/NMFS ICMS Rutgers University. 2001-2002. Further studies of the early life history and population dynamics of bluefish. \$178,061.

NOAA/NMFS ICMS Rutgers University. 2004-2007. Recruitment of bluefish in the Middle and South Atlantic Bights: effects of an ovarian nematode parasite and spatio-temporal patterns of juvenile recruitment. \$219,210.

National Park Service. 2003-2004. Managing the Fisheries Resources of Fire Island Natl. Seashore. \$23,000.

State Agencies

New York Department of Environmental Conservation. 2000-2004. Lower Hudson beach seine surveys. \$828,358.

New York Department of Environmental Conservation. 2004-2009. Recruitment and abundance of young of the year striped bass in the Hudson River. \$928,542.

Private Foundations

Sport Fishery Research Foundation. 1985-87. Daily growth increments in otoliths of bluefish: their use in analyzing recruitment of juveniles to Long Island. \$12,000.

Electric Power Research Institute. 1989-91. Predation on estuarine fish: size-structured piscivory in young-of-the-year bluefish. \$45,000.

Electric Power Research Institute. 1993-95. Dynamics of winter survival in young-of-the-year striped bass in the Hudson River. \$36,000.

Oak Ridge Associated Universities. 1995. Individual-based modeling at Stony Brook: Postgraduate research. \$8,146.

Hudson River Foundation. 1995-1998. Bioenergetics and habitat requirements of overwintering young-of-the-year striped bass: implications for recruitment. \$211,767.

The Hudson River Foundation. 2005-2007. Factors influencing the abundance and distribution of Atlantic silversides in the Hudson River. \$52,172.

The Pew Institute for Ocean Science. 2004-2007. Sustaining fishery yields over evolutionary time scales: Are harvest-induced genetic changes permanent? \$329,734.